

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>PRE-APPEAL BRIEF REQUEST FOR REVIEW</b>		Docket Number (Optional) <b>05999-0292-00</b>
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]  on _____  Signature _____  Typed or printed name _____	Application Number <b>10/594,269</b>	Filed <b>July 24, 2007</b>
	First Named Inventor <b>Carlo ZANOTTA</b>	
	Art Unit <b>3749</b>	Examiner <b>N. Mashruwala</b>

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest.

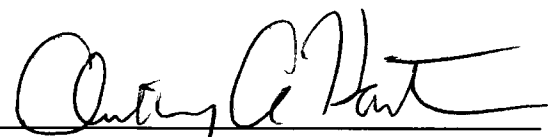
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.

☐ attorney or agent of record.

Registration number \_\_\_\_\_

☒ attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34 **43,662**

  
Signature

**Anthony A. Hartmann**

Typed or printed name

**(202) 408-4275**

Telephone number

**May 31, 2011**

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

☐ \*Total of \_\_\_\_\_ forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*

The Office maintains without explanation the rejection of claims 30 to 58 under 35 U.S.C. § 103(a) as allegedly “being unpatentable” over U.S. Patent No. 6,152,974 to Delpiano et al. (“Delpiano”) in view of U.S. Patent No. 6,375,691 to Zucchelli et al. (“Zucchelli”) and further in view of U.S. Patent No. 3,655,098 to Schnitzler (“Schnitzler”), for the reasons provided at pages 2 to 6 of the Jan. 31, 2011, Office Action. For at least the reasons discussed below, Applicant disagrees and traverses the rejection.

Claims 30 to 53 are directed to processes for producing a refuse derived solid fuel.

Claims 54 to 58 are directed to plants for producing the same. In relevant part, claim 30 recites:

separately metering and feeding said first shredded component [of solid urban waste] and said at least one second shredded component [of elastomeric mtl, thermoplastic mtl, or mix] onto a continuous conveyor in such a way so as to form successive layers of said shredded components on said continuous conveyor . . .

discharging said shredded components so assembled into at least one temporary accumulation container so as to form the refuse derived solid fuel . . . .

In other words, the claims require the formation of at least one layer of the first shredded component and at least one layer of the second shredded component on a conveyor belt, which discharges the layers into a temporary accumulation container.

#### **I. No Basis to Combine Delpiano with Schnitzler**

The Office admits that Delpiano “does not disclose feeding these shredded components on a continuous conveyor to form layers of shredded components in a temporary accumulation container.” Office Action at 3. Accordingly, the Office relies upon Schnitzler to teach “feeding and forming different materials/components to form different successive layers of the materials . . . on a continuous conveyor 16.” *Id.* at 3.

The Office alleges that it would have been obvious for a person of ordinary skill in the art to apply Schnitzler to Delpiano to obtain a continuous conveyor with successive layers “so that

the combination of the successive layers of varying bulk density would have better combustible properties.” *Id.* at 3. However, the Office has refused to address Applicant’s arguments that this alleged motivation is contrary to the teachings of Delpiano and Schnitzler.

First, the proposed modification improperly renders Delpiano unsuitable for its intended purpose. The purpose of Delpiano’s invention is to make a solid combustible composition while avoiding inconsistent calorific power and also avoiding agglomerating the components into granules or bricks. *See* Delpiano at col. 1 lines 23-33. Delpiano accomplishes this goal by triturating and mixing the USW, non-elastomeric plastic, and elastomeric materials together into a single shredded composition. *See, e.g.,* Delpiano at col. 2 lines 36-65, Fig. 1.

Yet, the proposed modification prevents Delpiano from obtaining this goal. As taught by Schnitzler, its component materials are *not* to be mixed together at all, but rather kept separate and placed in successive, overlapping layers. *See* Schnitzler at col. 3 lines 51-56 (“[T]he individual layers are superimposed one upon another on the processing conveyor band with the aid of individual depositing conveyors each of which forms the respective layer from a stationary pile of the corresponding comminuted materials . . .”). This aspect of Schnitzler’s process, which the Office adopts, is designed to achieve a layered product, fiberboard. *See, e.g.,* Schnitzler at col. 1 lines 7-11.

Hence, Schnitzler’s process yields a layered, unmixed, agglomerated product, which negates how Delpiano’s invention is designed to operate, which means the combination is non-obvious. *See* M.P.E.P. § 2143.01(V & VI).

Second, there is no independent evidence that Schnitzler’s process will yield “better combustible properties,” as alleged by the Office. Rather, the art suggests the opposite. As noted above, Schnitzler’s process is designed to achieve layers, which Applicant notes promotes

involuntary agglomeration of the materials. That is consistent with Schnitzler's goal of forming a layered fiberboard. Delpiano teaches a person of ordinary skill in the art to avoid forming the agglomerated mixtures, such as of Schnitzler, because they cause problems with "some kinds of boilers and burners . . . [which] can not be fed with a combustible agglomerated into granules or bricks." Delpiano at col. 1 lines 25-28. Hence, one of ordinary skill in the art would have no reasonable expectation of success to obtain better combustion properties by starting with a process that relies on thorough mixing (Delpiano) and then remove all mixing steps in favor of implementing select portions of a process for making fiberboard (Schnitzler).

Rather, a person of ordinary skill in the art reading Schnitzler and Delpiano would believe that the layering process of Schnitzler is *more* likely to *cause* inconsistency in calorific power because the individual components in layers would involuntarily agglomerate due to a lack of mixing. In accordance with the Examination Guidelines Update for obviousness after KSR, Applicant's invention is non-obvious and the rejection should be withdrawn as improper. *See Examination Guidelines Update*, 75 Fed. Reg. 53643, 53649 (Sept. 1, 2010) ("An inference that a claimed combination would not have been obvious is especially strong where the prior art's teachings undermine the very reason being proffered as to why a person of ordinary skill would have combined the known elements.").

## **II. No Basis to Combine Delpiano with Zucchelli**

The Office admits that Delpiano "does not disclose . . . a temporary accumulation container." Office Action at 3. Accordingly, the Office relies upon Zucchelli, arguing that "Zucchelli discloses a temporary storage 14 at the end of conveyor belt 19 (similar to silo 44 or 46) which would have been obvious for a person of ordinary skill in the art to be installed to the system of Depliano [sic] (& Schnitzler) in view of Zucchelli so that the storage material of the

shredded material layers can transported to a combustion plant for using as a fuel.” *Id.* at 4. The record, however, shows that the Office has no legitimate basis for this argument.

First, the Office has failed to address Applicant’s argument that the Office offers no reasoning as to why a person skilled in the art would even consider Zucchelli in this context. In contrast to Delpiano and Schnitzler, which relate to processes for providing materials to achieve a desired product, Zucchelli’s conveyor 19 and storage device 14 are directed to the removal and disposal of waste materials. Zucchelli, col. 6, lines 21-25. Hence, these teachings are being applied for contrary purposes.

Second, the Office has also failed to address Applicant’s argument that Zucchelli makes no mention of the use of a temporary storage so as to allow transport to a combustion plant. In fact, except for showing element 14 in Figure 8, there is no disclosure in Zucchelli regarding any alleged benefits of element 14. Indeed, using a temporary accumulation container in either Delpiano or Schnitzler would be either unnecessary (Delpiano) or disadvantageous (Schnitzler), and, thus, one of ordinary skill in the art would have no reason to add such an element.

The mere fact that a storage device is known in the art does not render a claim obvious. As stated in a memorandum to USPTO Technology Center Directions, “in formulating a rejection under 35 USC § 103(a) based upon a combination of prior art elements, it remains necessary to identify the reason why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed.” Memorandum from Margaret A. Focarino, Deputy Commissioner for Patent Operations, to Technology Center Directors (May 3, 2007).

The Office has provided no independent (i.e., without hindsight consideration of applicant’s specification) for a person skilled in the art to add temporary storage to Delpiano with any reasonable expectation of success.

### III. The Obviousness Rejection Improperly Relies on Applicant's Specification

The Office improperly uses Applicant's specification to provide the alleged motivations to combine.

First, as discussed above, neither Delpiano nor Schnitzler suggests that modifying Delpiano in view of Schnitzler would yield better combustion properties. Rather, only Applicant's specification teaches *Applicant's* discovery that better combustible properties result from forming successive layers of USW and at least one second component selected from an elastomeric material and a thermoplastic material (or mixtures thereof) on a continuous conveyor. Hence, the Office improperly relies upon Applicant's disclosure and not knowledge in the prior art.

Similarly, the Office improperly applies Applicant's specification to conclude that it would have been obvious to a person of ordinary skill in the art to install a temporary storage such as that disclosed in Zucchelli "so that the storage material of the shredded material layers can transported to a combustion plant for using as a fuel." Office Action at 4. The Office points to no teaching in the cited references that would direct a person of ordinary skill in the art to add a temporary storage container to Delpiano or Schnitzler. Only Applicant's specification teaches that better combustible properties can be obtained by depositing the successive layers of USW and at least one second component formed on the continuous conveyor into a temporary accumulation container.

For at least the reasons outlined above, Applicant respectfully requests reconsideration of this application, withdrawal of the claim rejections, and allowance of claims 30-58.